Attacks/Breaches

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Jai Vijayan
News

New Cryptocurrency Mining Malware Has Links to North Korea

A malware tool for stealthily installing software that mines the Monero virtual currency looks like the handiwork of North Korean threat actors, AlienVault says.

A security vendor has found another clue that North Korea may be turning to illegal cryptocurrency mining as a way to bring cash into the nation's economy amid tightening international sanctions.

AlienVault on Monday said it had recently discovered malware that is designed to stealthily install a miner for Monero, a Bitcoin-like cryptocurrency, on end-user systems and to send any mined coins to the Kim Il Sung University (KSU) in Pyongyang.

The malicious installer appears to have been created just before Christmas 2017 and is designed to install xmrig, an open source miner for Monero.

The link to the university itself doesn't appear to be working, however, meaning the software cannot send any mined coins back to its authors. The malware itself appears pretty basic, and the inclusion of the KSU server in the code could simply be a false flag to trick security researchers. Even so, the malware is consistent with previous similar campaigns tied to North Korea, AlienVault said.

"Cryptocurrencies could provide a financial lifeline to a country hit hard by sanctions," the vendor said. "Therefore it's not surprising that universities in North Korea have shown a clear interest in cryptocurrencies."

A cryptocurrency mining tool like xmrig is basically designed to harness the processing power of a computer in order to verify transactions in a blockchain. Users who put their computers to work mining virtual currencies such as Bitcoin and Monero typically receive small monetary rewards for allowing their hardware to be used for the purpose.

Crypto mining is legitimate activity. Some, like Coinhive, even distribute miners to website operators so users can run it in their browsers in exchange for an ad-free experience. In recent years, though, cybercriminals have increasingly begun hijacking computers in order to mine cryptocurrency for illegal profit.

In a report last September, IBM said that between January and July 2017 it had seen a six-fold increase in CPU mining attacks involving the use of malware for installing virtual currency mining tools against its customers. The tools typically were embedded in fake image files that were hosted on infiltrated servers running WordPress or

Joomla. Most of the attacks that IBM analyzed were designed to target virtual currencies such as Monero, whose CryptoNight algorithm can run on ordinary PCs and servers compared to the specialized hardware required for Bitcoin mining.

Last September, Kaspersky Lab reported finding two relatively large botnets comprised of computers infected with malware for installing legitimate cryptocurrency miners on them. The security vendor estimated that a 4,000-computer botnet used for cryptocurrency mining was netting its operators up to $30,000 a month, while a bigger 5,000-computer botnet was garnering its operators some $200,000 a month.

"As the price of crypto-currencies increase, so do the incentives to infect people with mining malware," says Chris Doman, security researcher at AlienVault. "Monero is becoming a popular choice as it is both more anonymous and more profitable to mine with malware."

Security researchers have found plenty of clues in recent months to suggest that Korea-linked threat actors like the Lazarus Group and others are actively engaged in cryptocurrency mining. Earlier this month, Bloomberg reported an incident in which a North Korea threat group called Andariel hijacked a server belonging to a South Korean organization and used it to mine about 70 Montero coins.

The Lazarus group has been caught doing Monero mining on compromised networks and attacking Bitcoin exchanges, Doman says. There have also been several public reports of North Korean universities looking into mining cryptocurrencies, Doman says. So while it is hard to say with complete certainty if the malware that AlienVault discovered is the work of North Korean actors, chances are high it is, he notes.

"The main takeaway for me is that this fits into the larger picture of North Korea and cryptocurrencies."

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Jai Vijayan is a seasoned technology reporter with over 20 years of experience in IT trade journalism. He was most recently a Senior Editor at Computerworld, where he covered information security and data privacy issues for the publication. Over the course of his 20-year ... View Full Bio

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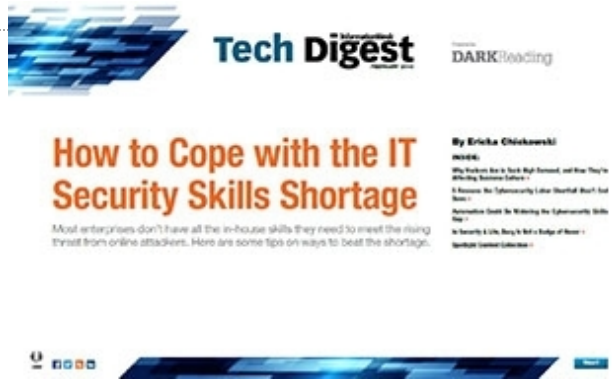

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Enterprise Vulnerabilities
From DHS/US-CERT's National Vulnerability Database

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unixsocket.c in lxterminal through 0.3.0 insecurely uses /tmp for a socket file, allowing a local user to cause a denial of service (preventing terminal launch), or possibly have other impact (bypassing terminal access control).

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A privilege escalation vulnerability in Brocade Fibre Channel SAN products running Brocade Fabric OS (FOS) releases earlier than v7.4.1d and v8.0.1b could allow an authenticated attacker to elevate the privileges of user accounts accessing the system via command line interface. With affected version...

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Improper checks for unusual or exceptional conditions in Brocade NetIron 05.8.00 and later releases up to and including 06.1.00, when the Management Module is continuously scanned on port 22, may allow attackers to cause a denial of service (crash and reload) of the management module.

CVE-2017-0890
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Nextcloud Server before 11.0.3 is vulnerable to an inadequate escaping leading to a XSS vulnerability in the search module. To be exploitable a user has to write or paste malicious content into the search dialogue.

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